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Chapter 13: Bond Markets

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Abstract

Bond finance plays an increasingly important role in debates about financial development, if not economic development more broadly. In this chapter, we first situate bond finance vis-à-vis other financing techniques. We will then provide a brief overview of the historical evolution of bond finance and how this has in turn informed the research field. In the section thereafter, we discuss challenges with measuring bond market development. The final section looks at two new and emerging areas of bond finance research of particular importance to low and middle income countries, namely attempts to develop a regional bond market in Asia and the emergence of sukuk, bond-like financial instruments that seek to comply with Islamic principles.

Introduction

Bond finance plays an increasingly important role in debates about financial development, if not economic development more broadly. In this chapter, we first situate bond finance vis-à-vis other financing techniques. We will then provide a brief overview of the historical evolution of bond finance and how this has in turn informed the research field. In the section thereafter, we discuss challenges with measuring bond market development. The final section looks at two new and emerging areas of bond finance research of particular importance to low and middle income countries, namely attempts to develop a regional bond market in Asia and the emergence of sukuk, bond-like financial instruments that seek to comply with Islamic principles.

What is bond finance and how does it matter?

Essentially, bonds are debt certificates specifying the relationship between creditor and debtor. They state the sum that is lent and the debtor's obligation towards the creditor. They are also referred to as debentures or obligations. What distinguishes bond debt from the other

major form of debt provided by the formal financial system, bank loans, is that bonds are easily transferable. Through bonds, a loan is broken up into smaller denominations and usually claims are marketable, meaning that they can be sold and bought in a secondary market. As a consequence, an intrinsic feature of bonds is that they are typically more liquid – easier to buy and sell – than traditional bank loans (see Chapter 14 of this volume). They are therefore a highly *mobile* form of capital. And this characteristic has implications for the role of bond finance as a *mode* of finance, i.e. the way credit is created and allocated, where debt – or credit – is increasingly extended via bond markets. The progressively more important role of bond markets as a source of funds has been seen as part of a more general paradigm shift from bank-intermediated finance to disintermediated capital market finance (Zysman 1983; but see Hardie and Howarth 2013).

However, important qualitative differences also exist between bonds and other forms of capital market finance, such as equity. Some borrowers do not have the capacity to offer equity to investors and thus would struggle to access equity markets. Sovereigns are a particularly important category of users of funds which can only to a very limited extent make use of equity capital markets in a capacity as borrower. Another obvious disadvantage of equity is the dilution of ownership and thus control. The longer term orientation, at least of the debtor¹, also distinguishes bond markets from money markets. Governments and corporations issue bonds both to (re)finance ongoing expenditures and to raise capital for new ventures such as investments in infrastructure and to buy new equipment or expand their business. Bond markets play an increasingly important role in the financing of government debt in a growing number of countries, including as a way for foreign capital to enter a country. This is both because countries are ‘graduating’ from having to rely heavily on bilateral and multilateral aid and because bond finance has increased its share vis-à-vis bank loans. Indeed, efforts in the early 1990s were very much focused on encouraging developing countries to ‘emancipate’ their banking systems by developing government bond markets (World Bank 1995; Fry 1997). Two decades later, the focus has shifted toward expanding both the range of actors who can access bond markets and the range of financial instruments traded in these markets.

Bond market development involves active government intervention in the workings of the market. This includes most obviously the creation of legal and regulatory frameworks, but goes well beyond this. Especially in developing country contexts, governments are typically

the most important borrowers. Thus, their borrowing decisions have a major influence on market development. This pertains to both the volume of borrowing (including potentially the ‘crowding out’ of corporate sector bond issuance if government borrowing utilizes all the available investment) and the nature of that borrowing, i.e. for how long they borrow and at what cost. Additionally, in their capacity as regulators of the financial system, governments have an important say on who can and must invest in bonds (e.g. to meet liquidity requirements) and who can access these markets under what conditions to raise funds. Such issues are often labelled somewhat pejoratively as ‘financial repression’, but often goes beyond simply restricting the activities of financial market actors. Furthermore, to function efficiently, bond markets require a range of so-called market supporting institutions and actors. These include trading platforms, clearing and settlement systems, custodians/securities depositories (especially in the case of scripless trading²), legal experts that draw up bond documentation, rating agencies that judge the creditworthiness of bonds and so on. To facilitate the constant availability of market pricing of bonds (important to mark-to-market accounting) in settings where secondary markets are not always very liquid, a number of countries, including South Korea, Malaysia and Indonesia, have created bond pricing agencies that provide as-if market prices (Rethel and Sinclair 2014).

Bond finance also has gained greater significance because of increasingly widespread practices of securitization. Securitization refers to a process where loans, or more specifically the future cash flows to be generated from these loans, are pooled and sold on in the form of bonds. These loans can be of various origins, for example mortgages, or consumer loans such as car loans or credit card receivables. In so doing, securitization effectively converts real assets and claims into liquid financial claims. The effects of securitization are pervasive. By selling on loans, banks can take them off their balance sheets and thus, it is thought, reduce their risk exposure. Moreover, by releasing capital, securitization also enhances liquidity. In theory, securitization aids the diversification of risk and could thus potentially lead to a more stable financial system (CGFS 2007). Yet in practice, due to the separation of originating and holding risk, widespread securitization practices contributed to the build-up of financial risk in the run up to the global financial crisis (GFC) of 2007-2009. One recent example of securitization that has rapidly gained traction in development circles are so-called diaspora bonds that securitize future remittance inflows and thus turn them into current liquid assets (Shimeles 2010).

International investors favour market development, particularly liquidity in government bond markets. In many developing countries, other than the government, only a small group of large financial institutions or non-financial corporations are likely to be seen as potential investments, so their influence on the range of borrowers is generally lower. However, despite this consistent policy preference, international investors are also seen by policymakers as more likely to prove fickle in the case of market difficulties. International investors have been shown to increase price volatility in government bond markets (Andritzky 2012), which must be balanced by a positive impact on government bond yields (or cost of borrowing) and aims in undertaking market development.

A brief overview of the history of bond finance and the development of the research field

The evolution of bond finance has gone hand in hand with the development of this increasingly interdisciplinary research field. Indeed, rather than being the sole purview of financial economists, bond finance has attracted interest from a range of social science perspectives. Bond finance looks back on a long and rich history. Its emergence is often traced back to financial experiments in Italian city states in the 12th century. As North and Weingast (1989) have shown, bond finance also was a crucial element in the consolidation of the national debt in 17th Century Britain (see also Harris 2009). Bond finance again was heavily implicated in a range of financial crises in the 19th Century including the ‘first’ Latin American debt crisis of the 1820s and the railway bond crisis of the 1890s (Dawson 1990; Eichengreen and Lindert 1989). A vibrant international bond market existed at the turn of the 20th Century (Ferguson 2006). However, it did not survive the political and economic strife of the following decades. The Bretton Woods system that emerged at the end of World War II, with its restrictions on international capital flows, was more geared towards bank finance – and in the case of development countries mainly evolved around bi- and multilateral aid and with the breakdown of Bretton Woods from the 1970s onwards increasingly private syndicated bank loans. Indeed, the waxing and waning fate of bond finance – and more generally the ‘great reversals’ of financial development (Rajan and Zingales 2003) – have been of particular interest to international economists and economic historians.

The post-World War II system of international bank lending collapsed in the 1980s with the onset of the international debt crisis (Cline 1995). New lending came to a virtual standstill as banks sought to reduce their exposure to developing countries and a decade of

protracted loan renegotiations and restructurings followed. In highlighting the interaction of government and market actors in these processes, the crisis helped to consolidate the emerging research field of International Political Economy. In her 1986 seminal book *Casino Capitalism*, Susan Strange (1986: 163), one of the foundational figures of the field, identified ‘the difficulty of raising long-term finance for economic development and the relative ease in borrowing short-term’ as a root cause of the crisis, exacerbated by the shift from bond finance to bank loans that had occurred in the post-World War II period. After the failure of various schemes to address the debt crisis, in 1989 then-US Treasury Secretary Nicholas Brady proposed a combination of economic reform and the conversion of bank loans into bonds to increase the tradability of debt and thus remove sovereign risk from bank balance sheets.

By the end of the following decade, 17 countries had converted outstanding bank debt into so-called Brady bonds, worth a nominal value of around US\$130 billion (Lee and Venezia 2000). One of the inadvertent long term effects of the Brady Plan was a decisive shift in international lending patterns to developing countries away from bank loans to bond finance (see figure 13.1). It was an important step in the development of the international bond market for emerging economies. By the mid-1990s, bond finance had overtaken bank loans as the main form of developing country external debt to private creditors. Note, however, that this source of funding was mainly available to the governments of middle income countries, which heightened disparities in access to financial markets across developing countries as a whole.

[Insert Figure 13.1 here]

Despite the shift in lending patterns, the international financial system remained far from crisis-proof and the 1990s witnessed a number of high profile emerging market crises, including the Mexican peso crisis of 1995 and the Asian financial crisis of 1997-98, which also spilled over into Russia and Latin America. These crises climaxed in Argentina defaulting on its external debt, by then mainly composed of bonds, in 2001. Amongst other things, these crises brought to the fore significant collective action problems when it came to restructuring outstanding bond debt, compounded by differences across jurisdictions. Thus, whilst the re-emergence of the international bond market had addressed the issue of concentration risk experienced by banks in the 1980s, the Argentine case in particular demonstrated how difficult it was to get dispersed creditors to agree on debt restructuring,

especially in the absence of legal clauses governing issues such as majority action. Various schemes to facilitate the restructuring of international bond debt were discussed in international fora, including a sovereign debt restructuring mechanism proposed by Anne Krueger (2001), then deputy managing director of the International Monetary Fund. International legal experts became heavily involved in these debates, advocating *inter alia* the widespread adoption of collective action clauses (CACs) in loan agreements (Buchheit 1998), the creation of a sovereign debt forum (Gitlin 2003) or looking into how lessons from in particular US domestic bankruptcy procedures could be harnessed for the international realm (Raffer 1990; Swarcz 2000). Many of the collective action problems surrounding bond defaults remain far from being fully resolved as evidenced by ongoing troubles with Eurozone debt as well as recent court rulings on the long running Argentine bond dispute.

These crises shared the heavy involvement of foreign investors and borrowing in foreign currencies. Since the late 1990s and in response to this, the development of domestic bond markets in emerging market economies has gained significant traction in academic and financial policymaking circles. Domestic government debt – denominated in domestic currency – now exceeds international government debt in many emerging market economies, often considerably so (Hansen 2007). In a range of countries, domestic corporate bond markets have also emerged, often for the first time in their financial history. This significant shift in debt market patterns was hard to imagine just a decade ago, when – in the wake of crises – emerging market governments were deemed to suffer from ‘original sin’, an inability to borrow long-term in domestic currency (Eichengreen and Hausmann 2005). A number of influential international financial institutions and groupings, including the IMF and the World Bank as well as the Basel-based Committee on the Global Financial System, have argued that the development of domestic bond markets ‘deserves high priority on the financial sector development agenda’ (World Bank and IMF 2001; see also CGFS 2007). In line with these new developments, a growing body of literature has emerged that focuses on the mechanisms of and different stakeholders involved in domestic bond market development (Goswami and Sharma 2011; Rethel and Sinclair 2014).

A number of international financial institutions (IFIs) have actively promoted and provided technical assistance to domestic bond market development; these activities have enjoyed the political support of the G8 countries.³ Recent years have also seen an increase in locally denominated debt issuance by IFIs and regional development banks. These efforts are

in part a deliberate contribution to market development and the diffusion of expertise (World Bank 2007; Rethel 2010). The World Bank has issued local currency bonds in Brazil, Malaysia and Turkey among others (World Bank, undated). This period is one in which ideas in favour of domestic bond market development were widespread and influential, but influential on the direction of policy change rather than resulting in similar levels of change across countries.

Over the last two decades or so, bond finance has been an important part of an increasingly pluralistic, but also complex, financial landscape. The shift to bond finance – and as part of this deliberate efforts to develop domestic bond markets – has come hand in hand with numerous financial innovations whose developmental impact are not always clear cut. Indeed, the role of bond finance in development has been far from uncontroversial. On the one hand, the ability to access bond finance and in particular the ability to attract foreign investors is an important marker of a country's capacity to graduate from least developed country status. In an ideal world, the availability of bond finance would give borrowers access to the long term funding deemed necessary for economic development. A deep and liquid bond market potentially increases the pool of finance that can be tapped to fund developmental projects and more generally to diversify a country's sources of funding.

On the other hand, bond finance is not without its own risks. Various scholars have pointed to how the more mobile nature of bond finance can exacerbate the problem of 'sudden stops' or reversals of capital flows (Calvo and Talvi 2008), the often pro-cyclical nature of the verdicts of bond rating agencies which are nevertheless crucial to the decision making of bond investors (Sinclair 2005) or the herd behaviour of investors especially in emerging market contexts (Bikhchandani and Sharma 2000). Whilst the development of domestic bond markets can address at least problems of currency mismatch, it is a resource intensive process and relies heavily on its 'fit' with the existing domestic financial structure, especially the availability of a pool of domestic investors able to engage in long term financing. For many countries, this restricts the suitability of the 'bond option'. One-size-fits-all certainly does not work when it comes to financial development and this is especially true for the case of bond markets.

Moreover, the development of bond markets is not neutral, but influences the way capital is allocated in that bond finance is easier to access for some borrowers than for others.

Size and reputation can play a role in this regard, especially as these factors tend to facilitate the credit rating process (Sinclair 2005). Indeed, in financial systems where capital markets have achieved greater prominence, bigger corporations can go directly to the capital market and issue bonds or equity. In contrast, households and SMEs remain reliant on the banking sector or less formal means of credit such as microfinance, loans from family members etc. Furthermore, according to French and Leyshon (2004: 270) financial disintermediation – including the development of bond markets – can lead to an ‘inability of intermediaries [such as commercial banks and development finance institutions] to cross-subsidize weaker borrowers and the emergence of a more direct relationship between credit risk and pricing [...that has] produced uneven financial outcomes’.

For example, there are suggestions that the so-called SME ‘finance gap’ is bigger in emerging market economies than in advanced economies (e.g. OECD 2006). That is, recent changes in emerging market debt have, at least to some extent, been less favourable for SMEs, which nevertheless play a crucial role as economic backbone in many emerging economies. This is exacerbated by the fact that most of the bank lending freed up by the development of bond markets – an increasingly important source of funding for big corporate borrowers in a number of emerging market economies – has been redirected at households. This gives rise to a two-tiered industrial finance structure: cheap(ish) and abundant financing for big corporations, expensive and restricted financing for SMEs. These dynamics illustrate the necessity of much more fine-grained analyses of the economic effects of different types of financial instruments. The introduction of new financial instruments and the development of new markets can have unintended consequences, which can be difficult to foresee. Moreover, they require the simultaneous build-up of regulatory capacity for those instruments; otherwise they generate excessive financial vulnerabilities as has been shown again and again in a series of financial crises.

How is bond market development measured?

With the growing focus on financial sector development and the expansion of bond finance as an increasingly interdisciplinary research field, the availability of data from both official and private sector sources has also considerably improved (Beck et al. 2010). However, this is not to say that measuring bond market development is a straightforward process, let alone that there exists unanimous agreement on what constitutes a developed bond market. Capital market development is typically measured by size, using indicators such as amount of

securities outstanding as share of GDP. For the case of bonds, this implies that more indebted countries are more developed, but as we can currently see with the experience of Greece this is not necessarily (or even most commonly) the case. Moreover, proxies related to the equity market are often used to draw conclusions on capital market development more broadly (e.g. Demirgüç-Kunt and Levine 2001; Rajan and Zingales 2003). Nevertheless, they offer only limited insights into the development of bond markets specifically (Herring and Nathporn 2006).

Recent more nuanced measures focusing on debt markets continue to be skewed in favour of market size relative to GDP (e.g., World Bank 2006). Trading volume is certainly generally higher in larger markets when size is considered in terms of absolute size, but the correlation between trading volume and size, when size is measured relative to GDP, is not high. For example, Lebanon has a sizeable domestic bond market relative to GDP. However, bonds are typically held to maturity, little trading occurs and the range of instruments is limited (Hardie 2012). There exists no correlation between market size relative to GDP and market turnover in domestic bond markets in either the World Bank data or our alternative data source discussed below (r^2 are just above zero). On its own, market size to GDP – measured as volume of bonds outstanding or trading volume – tells us little about the *development* of bond markets.

Therefore, one has to move beyond market size *per se* as a measure of development. Size across a range of market instruments (especially a range of borrowers) is indicative of market development, but increased borrowing, particularly government borrowing, does not in itself increase market development (although the government's approach to borrowing can of course influence development). Financial crisis-induced borrowing by western governments, for example, has not increased government bond market development. A more useful way to understand bond market development is to move away from individual measures of market size and towards seeing it as a process that has as its endpoint a 'complete' market in which all risks can be traded. While this is a theoretical construct, as markets cannot be completed, such an approach recognizes that market development involves both the range of financial instruments available to trade (asset structure) and the ability to transact (market liquidity).

There are a number of ways to measure the range of instruments available to trade. We could consider, for example, the broad range of increasingly complex types of bonds that have emerged as a result of financial innovation, many of which readers have seen discussed in post-mortems on the 2007-8 financial crisis. There are good reasons to avoid such an approach, however. One reason is the empirical problems of identifying genuinely different types of bonds from the blizzard of acronyms used to name them, and in the face of the often-overblown claims of the innovators. A second reason is that much financial innovation can be seen as cyclical rather than secular: it is implausible to suggest implicitly that the disappearance of ‘Collateralized Debt Obligations’ after 2008 represents a reduction in US bond market development. We therefore suggest here a simpler approach, looking at whether there are a sufficient range of different types of borrowers – governments, financial institutions and non-financial companies – in particular markets. While this is a measure of the ability of traders and investors to buy and sell bonds (or trade risk) for a range of borrowers, it also has the added value of making a more direct link with development through a greater capacity for a broader range of entities to borrow.

Figure 13.2 shows survey data on 2007 domestic bond market turnover from the Emerging Market Traders Association (EMTA), together with EMTA figures on market size (excluding the futures and options markets). They come from a survey of 60, mainly international, market participants. The figures are therefore indicative only of relative volume across markets (see also Garcia-Kilroy and Silva 2011: 14). However, the survey comes from the leading organization of the market participants responsible for a high proportion of buying and selling in these markets. It is focused specifically on domestic bond markets and covers over-the-counter trading, the predominant form of trading in nearly all bond markets. The countries in the report are limited to those included in the EMTA survey, and therefore to those deemed ‘emerging markets’. However, the excluded countries (with the obvious exclusion of those deemed ‘developed’) are highly likely to be those that are deemed too difficult to trade, so exclusion should be seen as an indication of low levels of bond market development.

[Insert Figure 13.2 here]

To allow comparison using a simple measure across different country cases, figure 13.2 considers trading volumes, in the bonds, futures and options markets as a percentage of GDP, and the range of borrowers (sovereign, corporate and financial institutions) in a country's domestic market with outstanding bonds in excess of 5 percent of GDP, as of end-2007. The choice of a threshold of 5 percent of GDP can be reasonably challenged as arbitrary, but is determined by what we regard as a reasonable estimation of what constitutes a meaningful market, while avoiding the 'bigger is better' assumption critiqued above. The inclusion of trading in futures and options markets is a crucial addition in this regard and clearly shows cross-country variations of bond market development. Nevertheless, the figure uses a log scale, because turnover in an active futures and options market is so high that it risks exaggerating differences between countries. The countries whose bond markets are nearest to being 'complete' in this analysis are at the top right of the figure, with South Korea the closest.

There clearly exist significant differences across the countries analysed. For illustrative purposes, in figure 13.2 we have highlighted the cases of Brazil, Lebanon, Malaysia and Turkey. The Brazilian market is highly liquid (mainly thanks to the futures and options market), but there is not the full range of government, financial and non-financial corporation bonds in meaningful size (domestic corporate bonds are only 1 percent of GDP). Malaysia, in contrast, has the full range of issuers, but a significantly lower level of trading activity. Turkey's trading is similar to Malaysia's, but it is concentrated in government bonds. Lebanon only has a government bond market (and it is large relative to GDP), but trading volume is very low.

As noted above, this remains a narrowly focused measure. In Brazil and Malaysia, for example, the availability of certain instruments, including floating rate notes and index-linked certificates, further helps investors to trade risk. The differences highlighted in figure 13.2, however, are in line with other approaches. One comparison of the ability to trade risk is the bid-offer spread, the difference between the prices at which the same security can be bought and sold. The narrower this spread, the easier to trade. Available data is limited, but continuing with the above example, Brazil has the narrowest spread of the four cases (CGFS 2007: 45; see also Mohanty 2002). The turnover ratio – volume traded as a multiple of outstanding debt – is similarly highest in Brazil, then Turkey, then Malaysia (CGFS 2007: 45). Figure 13.2 serves to highlight, imperfectly but more effectively than alternative

approaches, significant differences in the level and nature of bond market development. Further indicators of bond market development can be the range of investors in these markets, but here the data is even more opaque, or inclusion in bond market indices, which nevertheless again tend to suffer from a focus on market size and so indebtedness.

Emerging areas of research

Over the last decade, the international landscape of bond finance has become increasingly pluralistic. Here, we will look at two recent developments in the long history of bond finance. We focus on Asia, where much of the most interesting bond market development has occurred in recent years. Both examples demonstrate the importance of government actions in successful development. Bond market development is far from simply an issue of liberalization. The first case is efforts to create a regional bond market in East Asia. The second is the emergence of sukuk – often also referred to as Islamic bonds – and the question of whether ethical considerations can be embedded in this type of financial instrument.

Efforts to establish a regional bond market in East Asia

In the aftermath of the Asian financial crisis of 1997-98, regional policymakers identified ‘hot money’, highly volatile short term investment flows, in combination with overdependence on bank finance in little diversified financial systems as root causes of the crisis. The development of local bond markets was seen as a means to address these issues, more specifically to deal with the double mismatch of short-term, dollar-denominated borrowing for long-term, local currency investments (Katada 2009). Developing and promoting the regional bond market was seen as an important means to improve national financial architectures and thus to be able to better generate the long-term financial investment deemed necessary to address the infrastructure needs of the region. In addition to a range of domestic initiatives, deliberate efforts to develop bond markets were also undertaken on the regional level, giving rise to some unique forms of sovereign cooperation in the financial realm. These initiatives are state driven endeavours in which financial policymakers have taken the lead. However, the regional groupings involved in these initiatives differ slightly.

On the more narrowly defined East Asian regional level, the most important development has been the Asian Bond Markets Initiative (ABMI), endorsed in 2003 by the ASEAN+3 Finance Ministers Meeting.⁴ Under this framework, a number of working groups

have been set up to address core areas of bond market development. It also serves as a platform to facilitate the exchange of knowledge and expertise. Regular dialogues among ASEAN+3 officials themselves as well as with scholars, think tanks and the private sector are a cornerstone of ABMI (2008). Although endorsed on the political level, it is important to emphasize that the task of developing bond markets is largely left to technocrats, the staff of central banks and securities commissions and their likes (on a similar point, see also Culpepper 2011). ABMI has played a crucial role in bringing Asian financial policymakers closer to each other in a region where sovereignty is still jealously guarded, and acts as an increasingly important mechanism for the diffusion of best practices and technical expertise with regard to bond markets. Moreover, in the post-GFC environment, continued political commitment to the regional bond market project was signalled by the creation of the ASEAN+3 Bond Market Forum in September 2010. The ABMF brings together policymakers and market practitioners and in so doing seeks to facilitate greater market orientation, at least in terms of developing expertise. The Asian Development Bank acts as a facilitator of ABMI by providing technical and research assistance as well as hosting AsianBondsOnline, an electronic information platform. Moreover, by issuing bonds in local currency bond markets, ADB also takes on a role as market player and seeks to build developmental capacity (Dent 2008).

The second major development has been the Asian Bond Funds (ABF) initiative launched in 2003 by EMEAP, the Executives' Meeting of East Asia Pacific Central Banks. EMEAP reflects a broader regional configuration that includes Australia and New Zealand.⁵ Its first fund, ABF-1, was endowed with an initial capital of US\$1 billion. ABF-1 is managed by the Bank for International Settlement (BIS) and invests in US dollar denominated sovereign and quasi-sovereign bonds of eight EMEAP countries. Launched in 2004, ABF-2 invests in local currency denominated bonds. It consists of two elements, the Pan Asian Bond Index Fund (PAIF) and eight single market funds. While ABF-2 is a public initiative, endowed by the EMEAP central banks with a starting capital of US\$2 billion, most of the country funds are designed, managed and implemented by the private sector to ensure their market orientation (EMEAP 2006). This does not only highlight the crucial role played by policymakers in the constitution of bond markets but also the close ties between local financial authorities, private market actors and IFIs which are forged in the process of developing domestic bond markets. Moreover, ABF-1 and 2 constitute rather unique forms of sovereign financial cooperation. ABF-1 pools the international reserves of participating

central banks to invest in regional bonds and to strengthen their perception as an asset class. ABF-2 goes even further in that these pooled reserves provide seed funding, but the funds are open to bond investors more broadly. However, it is important to note that stark variations remain in the degree of development that bond markets across the region have achieved in terms of institutional infrastructure, investor sophistication and liquidity, amongst other things; levels of both cross-border issuance and investment are low. A truly regional Asian bond market is still a thing of the far distant future. Wider regional efforts such as the current implementation of the ASEAN Economic Community focus on the ‘freer’ flow of capital, rather than wholesale capital account liberalization and thus recognize the varying stages of financial development of ASEAN member countries (ASEAN 2008).

Sukuk – Islamic bonds?

Another new development in the field of bond finance is the emergence of sukuk, a class of financial instruments that comply with the principles of the Sharia (Islamic law). Islamic finance draws on religious values to promote what its advocates suggest is a (more) ethical approach to finance that is at the same time transaction-friendly. It joins the ranks of other investment approaches proclaimed to be ‘more ethical’ such as socially responsible finance, green financing or financing for development. Amongst the stipulations with which sukuk have to comply are the prohibitions of *riba* (the paying and receiving of interest), *maisir* (gambling) and *gharar* (uncertainty) (for a further elaboration of Islamic financial principles see Vogel and Hayes 1998). Moreover, these features of Islamic finance have to be seen in the wider context of Islamic economic philosophy, which contains strong elements of redistribution (notably through zakat, mandatory alms-giving by individuals and firms), the idea of participatory economic growth, and risk-sharing as the basis of a more equitable development, together with a certain materiality or transactions focus as expressed in the sanctity of contracts and property rights already maintained in the Quran.

Sukuk, a term derived from the Arabic word for certificate (*sak*), are often referred to as Islamic bonds, suggesting that they are conventional financial instruments dressed in Islamic principles. However, Saeed and Salah (2012: 41) emphasize that ‘the term “Islamic bond” does not entirely cover the substance of sukuk’. Conventional bonds, in typically having a fixed income guarantee based on a fixed rate of return and repayment of the principal, violate the prohibition of *riba*. At stake here is what Islamic scholars see as one of the key problems with fixed income debt instruments, the asymmetric sharing of risks where

the borrower is exposed to all sorts of commercial risks whereas the lender only bears the risk of default. The idea behind sukuk is to develop mechanisms through which creditors have to bear a greater share of these risks; they are intended to be risk-sharing instruments as opposed to securitization as a means of risk transfer. According to the Islamic Development Bank (no date), 'sukuk grants the investor a share of an asset, along with the commensurate cash flows and risk'. Thus, sukuk are typically structured in the form of claims on assets that generate an income stream, such as land/rental income or leased assets.

The first corporate sukuk was issued by Shell Malaysia in 1990 to finance a middle distillate synthesis plant. However, it was only from the early 2000s onwards that sukuk became a more widely accepted and used capital market instrument (see figure 13.3). Since then, the market for sukuk has developed rapidly and attracted interest from both Muslim and non-Muslim investors and borrowers, sovereign as well as corporate. In the wake of the GFC, a growing number of non-Muslim majority countries have sought to tap this relatively liquid segment of international financial markets. The year 2014 alone saw the debut sukuk issuance of countries as diverse as Hong Kong, the UK, South Africa and Luxembourg.

[Insert Figure 13.3 here]

There are various sukuk structures and depending on the underlying contract, sukuk can exhibit both debt and equity features. Indeed, the first corporate sukuk issued quite closely resembled conventional bonds stripped of the elements in breach of Sharia principles. For example, instead of fixed interest payments the return from the sukuk was classified as profit. Over the last decade or so, a range of sukuk structures have been introduced to the market. These include *mudaraba* (profit and risk sharing), *musharaka* (profit and loss sharing), *ijara* (lease), *murabaha* (mark-up pricing), *istisna* (project finance) and *wakala* (agency) contracts. More recently, a number of hybrid sukuk have been issued that combine various Islamic contracts.

Indeed, more generally in the wake of the GFC, the lines between equity and debt instruments are becoming increasingly blurred as hybrid financial instruments that exhibit both equity and debt features have gained greater prominence. This includes so-called contingent convertible bonds (Cocos) that convert into equity in the case of a priori specified trigger events or more recently the proposal of equity recourse notes (ERNs), where bond

repayments can take the form of being issued with new shares if the share price of the issuer falls below a certain level (Bulow and Klemperer 2015).

More recently there has been a growing interest not only in how sukuk have to be structured and marketed to comply with the principles of the Sharia, but also in what precisely constitutes socially productive financial instruments, i.e. to what purposes the capital raised via sukuk should be put. In 2014, the International Finance Facility for Immunization issued an US\$ 500 million sukuk to finance a child vaccination programme. This was followed by a social impact sukuk issued by Khazanah Nasional Berhad, the Malaysian sovereign wealth fund, in 2015. These sukuk are part of a new trend in financial markets where investors move beyond socially responsible investing, i.e. the screening out of ethically risky investments such as for example those linked to the arms trade, to social impact investing which subjects the business of the borrower to scrutiny by looking at whether it has a socially or environmentally beneficial impact.

Conclusion

Financial instruments such as bonds are not mere tools, but crucial components of the organization, efficiency and governance of financial systems. The re-emergence of the international bond market in the wake of the international debt crisis of the 1980s and the development of domestic bond markets over the last two or so decades have fundamentally changed the borrowing practices – and opportunities – of developing countries.

Concomitantly, bond finance – and its relationship with development – has become an increasingly rich interdisciplinary research field. In recent years, increased attention has been paid to the instruments themselves and the role they play in facilitating financial innovation as we discussed for the case of sukuk. However, the role that bond finance plays in development is not uncontroversial and some scholars are concerned about how the expansion of bond finance can contribute to what they see as the ‘financialization’ of development practice, where the focus has shifted from financing development to developing financial markets.

Endnotes

¹ Investors might want to buy bonds to diversify their portfolios, but typically can sell them at any time in the secondary market, so do not necessarily have the same long term orientation.

² Scripless trading refers to a system where only electronic securities are traded and no physical certificates are issued.

³ The G8 is an intergovernmental forum composed of eight countries: Canada, France, Germany, Italy, Japan, the UK, USA and Russia.

⁴ ASEAN+3 is composed of the ten members of the Association of Southeast Asian Nations (Myanmar/Burma, Cambodia, Laos, Vietnam, Thailand, the Philippines, Malaysia, Indonesia, Brunei Darussalam and Singapore) and China, Japan and South Korea.

⁵ The 11 EMEAP members are: Reserve Bank of Australia, People's Bank of China, Hong Kong Monetary Authority, Bank Indonesia, Bank of Japan, Bank of Korea, Bank Negara Malaysia, Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, Monetary Authority of Singapore, Bank of Thailand.

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